

Application No.: 10/052,767

2

Docket No.: 8733.215.20-US

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancel)

Please add the claims 23-32 as follows:

B¹ 23. (New) A method of making a liquid crystal display including an array of thin film transistors (TFTs), comprising:

providing a substantially transparent first substrate;

disposing a gate metal layer of said first substrate and patterning an array of TFT gate electrodes and gate address lines therefrom;

disposing a semiconductor layer on said first substrate over said gate electrodes and patterning the semiconductor layer to form TFT areas;

disposing and patterning drain and source electrodes on said substrate over the semiconductor layer;

providing drain address lines for addressing the drain electrodes;

disposing a substantially continuous organic insulating layer on said substrate over said address lines and said drain and source electrodes to a thickness of at least about 1.5 μm ; and

disposing and patterning an array of substantially transparent pixel electrodes on said substrate over said insulating layer so that the patterned pixel electrodes overlap said gate and drain lines in order to increase the display's pixel aperture ratio,

wherein a parasitic capacitance corresponding to an overlap of each of the pixel

DC:50237867.1

Application No.: 10/052,767

3

Docket No.: 8733.215.20-US

electrodes to one of the gate and drain lines is no greater than 0.01pF.

24. (New) The method of claim 23, wherein a pixel pitch of the display is about 150 μm .

25. (New) The method of claim 23, wherein the organic insulating layer includes Benzocyclobutene (BCB).

26. (New) The method of claim 23, wherein the organic insulating layer has a dielectric constant of less than about 3.0.

27. (New) A method of making an array of thin film transistors (TFTs), comprising:
providing a substrate;
forming an array of TFTs on the substrate, each TFT including a gate, source and drain;
providing a plurality of address lines on the substrate for addressing the array of TFTs;
forming an insulating layer including Benzocyclobutene (BCB) over the array of TFTs
and over the address lines; and

forming an array of substantially transparent pixel electrodes on said substrate over said insulating layer so that the pixel electrodes overlap said address lines in order to increase the display's pixel aperture ratio,

wherein a parasitic capacitance corresponding to an overlap of one of the pixel electrodes to one of the address lines is no greater than 0.01pF.

DC:50237867.1

Application No.: 10/052,767

4

Docket No.: 8733.215.20-US

28. (New) The method of claim 27, wherein a pixel pitch of the display is about 150 μm .

29. (New) A method of making an array of thin film transistors (TFTs), comprising:
providing a substrate;

forming an array of TFT gate electrodes and gate address lines on the substrate;

forming a semiconductor layer over the gate electrodes on the substrate;

providing a plurality of drain address lines on the substrate;

forming an array of TFT drain and source electrodes on the substrate over the semiconductor so as to form the array of TFTs;

forming an organic insulating layer having a dielectric constant of less than about 3.0 on the substrate over the source and drain electrodes; and

forming an array of pixel electrodes over the insulating layer and overlapping the gate and drain address lines,

wherein a parasitic capacitance corresponding to an overlap of each of the pixel electrodes to one of the gate and drain address lines is no greater than 0.01pF.

30. (New) The method of claim 29, wherein the organic insulating layer is substantially transparent.

31. (New) The method of claim 29, wherein the organic insulating layer is at least about 1.5 μm thick.

DC:50237867.1

Application No.: 10/052,767

5

Docket No.: 8733.215.20-US

32. (New) The method of claim 31, wherein the organic insulating layer is at least about 1.5 μm thick in an overlap area of the pixel electrode and one of the gate and drain address lines.

B1

DC:50237867.1